

Attorney Docket No.: KUZ-0018
Inventors: Yasukochi et al.
Serial No.: 10/502,412
Filing Date: July 23, 2004
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This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of the claims:

Claim 1-4 (canceled)

Claim 5 (currently amended): The production process according to Claim ~~2-or-9~~ 27 or 28, wherein the crosslinking functional group is a hydroxyl group, and the crosslinking agent is boric acid.

Claim 6 (canceled)

Claim 7 (currently amended): A medical patch comprising a pressure-sensitive adhesive shaped product produced by the process according to Claim ~~2-or-9~~ 27 or 28, said pressure-sensitive adhesive shaped product containing substantially no water.

Claim 8-9 (canceled)

Claim 10 (currently amended): The production process according to ~~claim 2~~ claim 27, wherein the crosslinking is carried out at 60°C to 150°C.

Claim 11 (previously presented): The production process according to claim 10, wherein the crosslinking is carried out at 100°C to 150°C.

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Claim 12 (currently amended): The production process according to ~~claim 2~~ claim 27, wherein the crosslinking is carried out for approximately 15 minutes to one hour.

Claims 13-15 (canceled)

Claim 16 (currently amended): The production process according to ~~claim 2~~ claim 27, wherein the crosslinkable monomer unit is selected from hydroxyl group-containing acrylate monomers and hydroxyl-group containing methacrylate monomers.

Claim 17 (previously presented): The production process according to claim 16 wherein the hydroxyl group-containing acrylate monomer is selected from 2-hydroxyethyl acrylate, 3-hydroxypropyl acrylate and 4-hydroxybutyl acrylate.

Claim 18 (previously presented): The production process according to claim 16 wherein the hydroxyl group-containing methacrylate monomer is selected from 2-hydroxyethyl methacrylate, 3-hydroxypropyl methacrylate and 4-hydroxybutyl methacrylate.

Claim 19 (currently amended): The production process of ~~claim 2~~ claim 27, wherein the polymer is a copolymer of 2-hydroxyethyl acrylate, 2-ethylhexyl acrylate or N-vinyl-2-pyrrolidone.

Claim 20 (canceled)

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Claim 21 (currently amended): The production process according to ~~claim 9~~ claim 28 wherein the crosslinking is carried out at 60°C to 150°C.

Claim 22 (previously presented): The production process according to claim 21 wherein the crosslinking is carried out at 100°C to 150°C.

Claim 23 (currently amended): The production process according to ~~claim 9~~ claim 28 wherein the crosslinking is carried out for approximately 15 minutes to one hour.

Claim 24-26 (canceled)

Claim 27 (new): A process for the production of a medical patch, said process comprising:

(a) dissolving in a lower alcohol:

(i) a hormonal drug selected from estradiol and norethisterone acetate; and

(ii) an acrylic polymer or a methacrylic polymer having at least one hydroxyl or carboxyl group in a crosslinkable monomer unit;

(b) adding to the solution of step (a) one or more crosslinking agents selected from the group consisting of metal alcoholates, boric acid, borate and borate ester;

(c) spreading the mixture of step (b) on a film; and

(d) thermally crosslinking the polymer of (ii) with the one or more crosslinking agents of step (b) either simultaneously with or followed by laminating to a support.

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Claim 28 (new): A process for the production of a medical patch, said process comprising:

(a) dissolving in a lower alcohol:

(i) a drug selected from estradiol and norethisterone acetate; and

(ii) one or more crosslinking agents selected from the group consisting of metal alcoholates, boric acid, borate and borate ester;

(b) adding to the solution of step (a) an acrylic polymer or a methacrylic polymer having at least one hydroxyl or carboxyl group in a crosslinkable monomer unit to the solution;

(c) spreading the mixture of step (b) on a film; and

(d) thermally crosslinking the polymer of step (b) with the one or more crosslinking agents of (ii) either simultaneously with or followed by laminating to a support.